

A NORTH AMERICAN SPECIES OF THE GENUS *PROSOPIGASTRA*

(HYMENOPTERA, SPHECIDAE)

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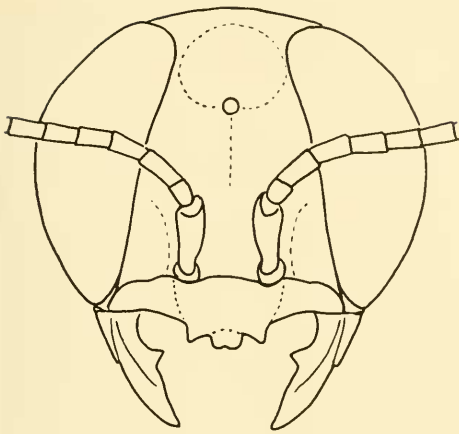
During a visit to the U. S. National Museum, I was advised by K. V. Krombein that specimens in my collection labeled as a possible new subgenus of *Tachysphex* were in reality *Prosopigastra* Kohl, a genus previously thought to be exclusively Palearctic and Ethiopian. Although similar to *Tachysphex*, the abdominal puncturation of *Prosopigastra* is coarse, and the second tergite is rather sharply rounded laterally. Dr. Krombein has loaned three species for comparison—*P. (Prosopigastra) orientalis* de Beaumont from Cyprus, *P. (Prosopigastra) ucavi* Turner from southern Rhodesia, and *P. (Homogambrus) cimicivora cypriaca* de Beaumont from Cyprus. In details of wing venation, mandibular and clypeal structure, and general body form, the Californian species is remarkably like the others, particularly those in the typical subgenus. *Homogambrus* Kohl, in which the male is holoptic or nearly so, is somewhat less closely related. However, all of the exotic species seem to have a prominent hump between the antennal insertions and the median ocellus. This area is merely convex in our species, and this circumstance may indicate a new subgenus. As only the one Nearctic species is known, I prefer to retain it in the typical subgenus at least temporarily. It occurs over a variety of life zones from boreal to lower sonoran and has been found nearly the length of the state, but always in dry, sandy terrain. Adults have been collected lighting on the ground after the fashion of *Tachysphex*, and in one instance on flowers of *Phacelia*.

The holotype will be deposited in the California Academy of Sciences and paratypes in the U. S. National Museum, California Insect Survey, and University of California at Davis.

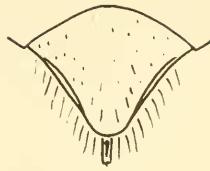
***Prosopigastra nearctica*, new species**

Male.—Length 6.0 mm., length of forewing 3.5 mm. Black with orange red markings as follows: mandible mostly, tegula and wing base, knee spots, tibiae distally, tarsi, tergites I-II entirely, III basally, sternite II. Abdominal segment VII and mouth parts brownish. Wings lightly stained, median cell of forewing

Prosopigastra nearctica Bohart, n. sp. Fig. 1, front view of holotype head; fig. 2, pygidium of female paratype; fig. 3, clypeus of female paratype; fig. 4, enlarged profile of one lobe of holotype aedeagus; fig. 5, distal one-half of holotype forewing; fig. 6, ventral view of flattened holotype genitalia (aedeagus split and volsella removed from one side).



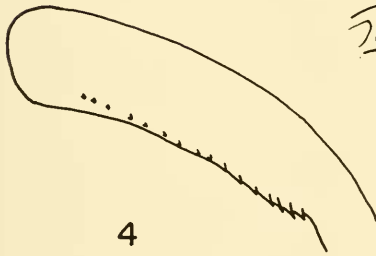
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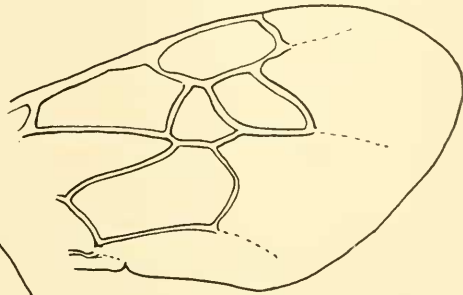
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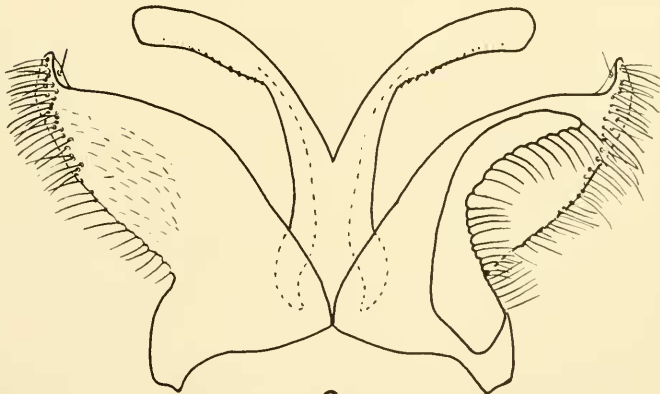
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sparsely setose, practically bare toward center. Pubescence moderate, dull silvery, rather coarse, appressed, covering most of face below ocelli, upper mesopleuron, mesonotum posteriorly, postscutellum, propodeum laterally, and apical margins of tergites, otherwise well distributed but scanty; some erect hair along apical margins of sternites, thickest and about as long as last tarsal segment on V and VI; tarsi with slender to stout pale spines. Puncturation of body rather coarse, punctures mostly separated by about a puncture diameter, about 2 diameters or more toward rear of mesonotum; scutellum, pronotal lobe and tegula mostly polished as are distal margins of tergites IV and following; sternites II and following with irregular puncturation, III-IV traversed by smooth welts. Head a little broader than long, eye as broad as middle of frons in front view, least interocular distance equal to lengths of pedicel and first two flagellar segments; median apex of clypeus as in figure 1; flagellar segments somewhat flattened, not convex beneath, first one about twice as broad as long, others progressively slightly shorter except last which is also twice as broad as long; frons gently swollen toward middle; ocellar area strongly but evenly convex, not shiny, backed by a deep V on the vertex. Propodeal enclosure about as long as scutellum, with oblique striae which are partially broken up into areolae, posterior face rough and with oblique striae continued around sides to a basal shiny area; mesosternum with a small, blunt tooth halfway between anterior margin and precoxal transverse ridge. Last sternite shallowly excavated at apex, genitalia as in figures 4 and 6.

Female.—About as in male except as follows: mandible, pronotal lobe, tibiae, and tergite III with reddish areas more restricted, sternite II with a lateral dark spot. Sternites V and VI with only a row of erect hairs. Eye in front view about as broad as least interocular distance which about equals length of pedicel and first three flagellar segments. Median apex of clypeus with a pair of small approximate teeth flanked at some distance by a tooth directly below antennal insertion (fig. 2), clypeal bevel broad, triangular, sparsely punctured. Fore tarsal comb of long, slender, black bristles. No mesosternal tooth. Tarsi with stout dark spines, especially on two more basal segments. Pygidium flattened, broadly rounded at tip, lateral margins distinct (fig. 2).

Types.—**Holotype male**: Brockway Summit, Placer Co., California, on flowers of *Phacelia*, July 25, 1957 (R. M. Bohart). **Paratypes** (all from California); 2 males, 1 female, same data as type; 2 males, 3 females, Carnelian Bay, Lake Tahoe, Placer Co., Aug. 22, 1955, and July 22, 1957 (R. M. Bohart); 1 male, Sagehen Creek, Nevada Co., July 25, 1956 (R. M. Bohart); 2 males, Cassel, Shasta Co., July 15, 1955 (R. M. Bohart); 1 female, Yuba Pass, Sierra Co., Aug. 20, 1955 (E. I. Schlinger); 1 male, 1 female, Strawberry, Tuolumne Co., July 15, 1951 (J. W. MacSwain); 1 male, Boca, Nevada Co., July 25, 1957; 4 males, Hallalujah Junction, Lassen Co., July 4-15, 1951-57 (E. I. Schlinger, R. C. Bechtel, R. M. Bohart). **Metatypes**: 7 males, 4 females, Borrego Valley, San Diego Co., Calif., sand dunes, April 19, 1957 (R. C. Bechtel, H. R. Moffitt, E. I. Schlinger, R. M. Bohart); 1 male, San Diego Co., Calif. ("thru C. V. Riley," U.S.N.M.).